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Distribution extension of *Aotus azarae infulatus* (Kuhl, 1820) (Primates: Aotidae) and first record from the Caatinga biome

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Abstract: The Feline Night Monkey, *Aotus azarae infulatus* (Kuhl, 1820), is recorded for the first time in the Caatinga biome and in the state of Piauí, northeastern Brazil, and represents a range extension of 163 km northeast from the nearest previously known occurrence of this species.

Key words: Feline Night Monkey; Mammalia; new record; Northeastern Brazil; state of Piauí; Parnaíba River

Northeastern Brazil includes one of the least studied biomes of the country, the Caatinga. This biome covers more than 735,000 km^2 and is the only one that is endemic to Brazil. However, the Caatinga has very high rates of anthropogenic disturbance (Leal et al. 2005).

Night monkeys, genus *Aotus* Illiger, 1811, are the only nocturnal simians (Hershkovitz 1983). This genus ranges widely throughout forested areas from Panama to northern Argentina (Wright 1981). In Brazil, it occurs in the Amazon, Pantanal and Cerrado biomes (Silva-Júnior et al. 2008). Silva-Júnior and Fernandes (1999) gave its eastern most extent of its distribution to the Parnaíba River in the state of Maranhão, Brazil.

Fernandez-Duque et al. (2013) described *Aotus azarae infulatus* (Kuhl, 1820), as a Brazilian endemic subspecies from the southern Amazonas river basin, with an isolated population in the southeastern tip of Amapá state, and populations on the Marajó and Caviana islands, and extending east to Parnaíba River in the state of Maranhão. The southern limit of this subspecies' range is the Tocantins River and the western limit is the Tapajós and Juruena rivers.

The present study presents a range extension for *A. azarae infulatus* (and the first records of the genus *Aotus*) from the state of Piauí and in the Caatinga biome.

Twelve expeditions to northern Piauí state were carried out from July 2008 to June 2010. In order to gather information about local biodiversity, 100 interviews with local villagers and farmers were made. In addition, random transects were realized, looking for evidence of animals.

Aotus azarae infulatus was recorded in a forested area near to the locality of Estreito, in the municipality of Buriti dos Lopes, state of Piauí (03°19′03.362″ S, 041°54′14.468″ W) (Figure 1). A group of about six individuals was seen feeding on Sweetsop fruit (*Annona squamosa* L.) in the backyard of a small house at an edge of a forest. The house owner reported that the night monkeys come every night during the fruiting season of the Sweetsop. Another group, feeding on Sapodilla fruits (*Manilkara zapota* (L.) P. Royen), was recorded at the Paulicéia Farm (03°27′42.652″ S, 041°57′23.834″ W) in Caxingó municipality, Piauí state.

Aotus azarae infulatus is part of the "red neck" species group of *Aotus* (*sensu* Hershkovitz 1983). The subspecies was identified based on the color characters proposed by (Hershkovitz, 1983): the usual absence of a whitish band between lateral corner of eye and blackish temporal stripe; orange of underparts extending to or above ventral half of side of neck and to mid-tibia or ankle; throat with at least anterior portion of sides mostly or entirely grayish agouti; and upper surface of proximal portion of tail orange or straw-color.

The new records are located in the Caatinga biome (IBGE 2004), in the area between the Parnaíba and Longá rivers; the latter is a tributary of the former river (Figure 2). The vegetation in both areas is composed of a mix of dry forest and Carnauba Palm (*Copernicia prunifera* (Mill.) H. Moore). This forest is medium-sized (with a canopy height between 3 and 10 m); it is a seasonal, deciduous forest bearing species from Caatinga and Cerrado biomes. Local farmers related that the hollow

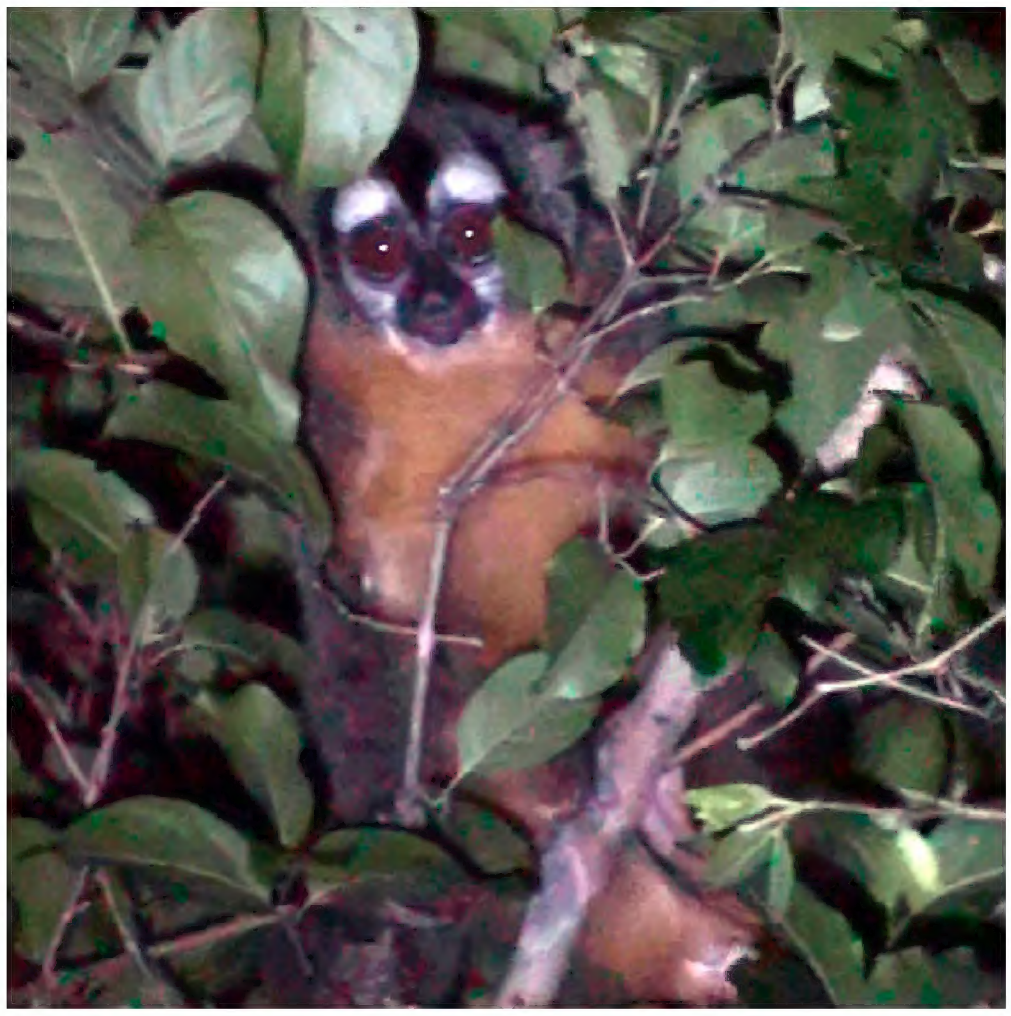

Figure 1. Feline Night Monkey *Aotus azarae infulatus* recorded at Estreito, municipality of Buriti dos Lopes, state of Piauí, Brazil. Photo by Thieres Pinto.

trunks of Carnauba Palms are used for shelter by night monkeys. Elsewhere, members of the genus are known to live in palm forests (Fernandez-Duque et al. 2013).

Silva-Júnior and Fernandes (1999) presented a record of *A. azarae infulatus* from Brejinho, municipality of Caxias, state of Maranhão. Their geographic coordinates, however, are probably incorrect and actually located in the municipality of Altos, state of Piauí, 48 km east of the Caxias municipal border. Based on the closest reliable location in their work (São Miguel, Caxias; 04°39′00″ S, 043°36′00″ W), the new records extend the geographic distribution of the subspecies by about 220 km to the northeast. Paulicéia Farm is located within the Caatinga biome, 20 km from edge of the Cerrado biome.

The Longá River was found to be the eastern limit of this subspecies' range. Interviews with locals indicated that this monkey occurs only on the western side of this river. As Silva-Júnior and Fernandes (1999) predicted, the Parnaíba River does not seems to be a barrier to this subspecies' dispersal to the east.

Silva-Júnior and Fernandes (1999) also presented a record from "north-west Bahia" based on a specimen

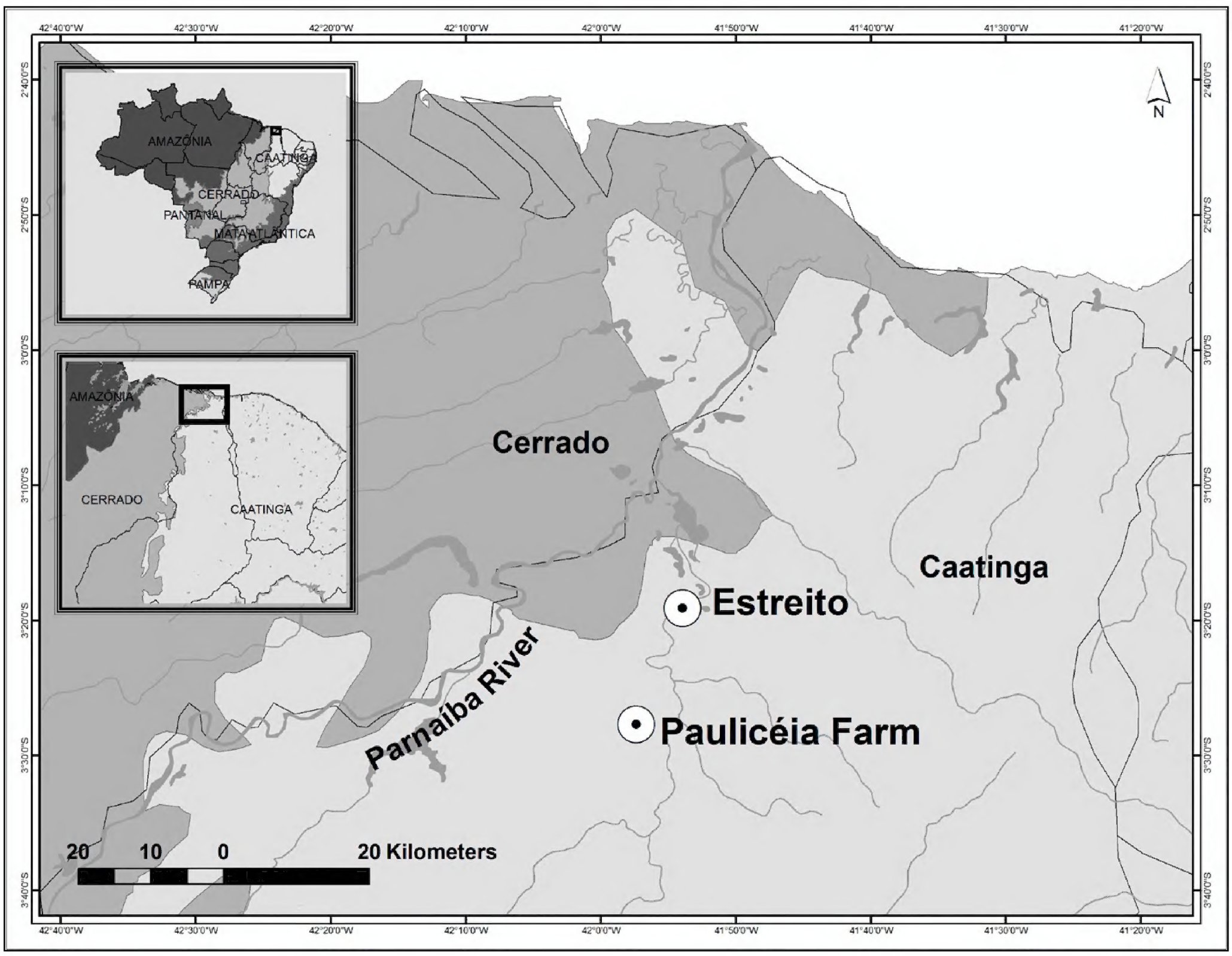

Figure 2. Map of the distribution of *Aotus azarae infulatus* showing new records.

from Museu Nacional, Rio de Janeiro (MN 3904). Unfortunately, it is impossible to know whether this specimen was collected from the Caatinga or Cerrado biomes. Silva-Júnior and Fernandes (1999) indicated that is record is possibly based on mistake. Therefore, the new records are the first reliable ones of *A. azarae infulatus* from the Caatinga biome, in an ecotone with the Cerrado biome.

Interviews showed evidence of hunting, trade and maintenance of these animals as pets. This evidence and the fact that this biome is highly modified by anthropic activities represents serious threats to populations of these animals in this region.

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